

Mr. Kurt Anderson  
Monaco Coach Corporation  
400 Indiana Avenue  
Wakarusa, IN 46573

Re: Significant Source Modification No:  
039-12758-00017

Dear Mr. Anderson:

Monaco Coach Corporation applied for a Part 70 operating permit on December 12, 1996 to a pharmaceutical processing plant. An application to modify the source was received on September 28, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) One (1) barrier coat spray station (BC-1), utilizing non-atomized spray techniques, with a maximum capacity of four (4) units per hour, controlled by dry filters and exhausting to stack SV 36-14.
- (b) One (1) natural gas-fired air make-up unit, rated at two (2) million British thermal units (MMBtu) per hour.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. Pursuant to Contract No. A305-0-00-36, IDEM, OAM has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Mike Pring, ERG, P.O. Box 2010, Morrisville, North Carolina 27560, or call (919) 468-7840 to speak directly to Mr. Pring. Questions may also be directed to Duane Van Laningham at IDEM, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments  
ERG/MP

cc: File - Elkhart County  
U.S. EPA, Region V  
Elkhart County Health Department  
Northern Regional Office  
Air Compliance Section Inspector - Paul Karklewicz  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner  
Title V File - 039-7559-00017

## **PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY**

**Monaco Coach Corporation  
606 Nelson's Parkway  
Wakarusa, Indiana 46573**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 039-12758-00017	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 15, 2001

## TABLE OF CONTENTS

### SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]
- A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

### SECTION B GENERAL CONSTRUCTION CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions [326 IAC 2-7-1]
- B.3 Effective Date of the Permit [IC13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]
- B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]

### SECTION C GENERAL OPERATION CONDITIONS

- C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]
- C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- C.4 Opacity [326 IAC 5-1]
- C.5 Operation of Equipment [326 IAC 2-7-6(6)]

#### Testing Requirements [326 IAC 2-7-6(1)]

- C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

#### Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

#### Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.8 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC  
2-7-6] [326 IAC 1-6]
- C.9 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.10 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.11 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]
- C.12 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

### SECTION D.1 FACILITY OPERATION CONDITIONS

#### Emissions Limitation and Standards

- D.1.1 PSD Limit [326 IAC 2-2]
- D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]
- D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

## **TABLE OF CONTENTS (Continued)**

### **Compliance Determination Requirements**

- D.1.5 Testing Requirements [326 IAC 3-2.1]
- D.1.6 Volatile Organic Compounds (VOC)
- D.1.7 Particulate Matter (PM)
- D.1.8 Training Requirements

### **Record Keeping and Reporting Requirements**

- D.1.9 Record Keeping Requirements
- D.1.10 Reporting Requirements

### **Certification Quarterly Report**

## SECTION A

## SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

---

The Permittee owns and operates a stationary recreational vehicle manufacturing operation.

Responsible Official: Kurt Anderson  
Source Address: 606 Nelson's Parkway  
Mailing Address: P.O. Box 465, Wakarusa, Indiana 46573  
Phone Number: (219) 862-7347  
SIC Code: 3716, 3083  
County Location: Elkhart  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules;  
Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

---

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) One (1) barrier coat spray station (BC-1), utilizing non-atomized spray techniques, with a maximum capacity of four (4) units per hour, controlled by dry filters and exhausting to stack SV 36-14.
- (b) One (1) natural gas-fired air make-up unit, rated at two (2) million British thermal units (MMBtu) per hour.

### A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

---

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).

## **SECTION B                      GENERAL CONSTRUCTION CONDITIONS**

### **B.1      Permit No Defense [IC 13]**

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2      Definitions [326 IAC 2-7-1]**

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### **B.3      Effective Date of the Permit [IC13-15-5-3]**

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

### **B.4      Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]**

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5      Significant Source Modification [326 IAC 2-7-10.5(h)]**

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a)      The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b)      If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c)      If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d)      The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (1)      If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.
- (2)      If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.

- (3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.



## SECTION C GENERAL OPERATION CONDITIONS

### C.1 Certification ~~[326 IAC 2-7-4(f)]~~~~[326 IAC 2-7-6(1)]~~~~[326 IAC 2-7-5(3)(C)]~~

---

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

### C.2 Preventive Maintenance Plan ~~[326 IAC 2-7-5(1),(3) and (13)]~~ ~~[326 IAC 2-7-6(1) and (6)]~~ ~~[326 IAC 1-6-3]~~

---

- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) upon startup after issuance of this approval, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

### C.3 Permit Amendment or Modification ~~[326 IAC 2-7-11]~~ ~~[326 IAC 2-7-12]~~

---

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

#### C.4 Opacity [326 IAC 5-1]

---

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations) opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.5 Operation of Equipment [326 IAC 2-7-6(6)]

---

Except as otherwise provided by the statute or rule, or in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

### Testing Requirements [326 IAC 2-7-6(1)]

#### C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

---

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

**C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

---

Compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

#### **C.8 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]**

---

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this approval;
  - (3) The Compliance Monitoring Requirements in Section D of this approval;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.

- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

**C.9 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]**

---

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.
- (c) The Permittee may agree to follow an alternative set of compliance procedures other than those set out in (a) and (b) above, if it and IDEM, OAQ, agree to a different schedule of activities to address any noncompliant situation.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.10 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]**

---

- (a) With the exception of performance tests conducted in accordance with Section C - Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, monitoring, maintenance procedures, or record keeping, reasons for this must be recorded.

- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.11 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

---

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this approval;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.12 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

---

- (a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) barrier coat spray station (BC-1), utilizing non-atomized spray techniques, with a maximum capacity of four (4) units per hour, controlled by dry filters and exhausting to stack SV 36-14.
- (b) One (1) natural gas-fired air make-up unit, rated at two (2) million British thermal units (MMBtu) per hour.

The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

### Emissions Limitation and Standards

#### D.1.1 PSD Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the combined input of volatile organic compounds (VOC) to Plants 1, 20, 22, 26, 28, 29, 30, 31, 36, 37, 38, and 45 shall be limited to 249 tons per twelve (12) consecutive month period.

#### D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The new barrier coat spray station (BC-1) is subject to the requirements of 326 IAC 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions. Pursuant to 326 IAC 8-1-6, operating conditions for the fiberglass production operations shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic HAP from use of such resins and gel coats only shall be less than 249 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
  - (1) Monthly usage by weight, weight percent content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. The emission factors used shall be approved by IDEM, OAQ.
  - (2) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emissions mass basis:



Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production <sup>1</sup> Gel Coat	37
Tooling <sup>2</sup> Gel Coat	45
Production Resin, Manual or Mechanical Application, -- Non corrosion Resistant Filled ( $\geq 35\%$ by weight)	38
Production Resin	35
Tooling Resin	43

<sup>1</sup> Production refers to the manufacture of parts.

<sup>2</sup> Tooling refers to the manufacture of the molds from which parts are manufactured.

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in this subsection or additional emission reduction techniques approved by IDEM, OAM may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

$$Em_A \leq (M_R * E_{Ra}) + (M_G * E_{Ga})$$

Where:

$M_R$  = Total monthly mass of resins within each resin category

$M_G$  = Total monthly mass of gel coats within each gel coats category

$E_{Ra}$  = Emission factor for each resin based on allowable monomer content and allowable application method for each resin category.

$E_{Ga}$  = Emission factor for each gel coat based on allowable monomer content for each gel coat category

$Em_A$  = Actual monthly emissions from all resins and gelcoats based on material specific emission factors, emission reduction techniques and emission controls

Units: mass = tons  
emission factor = lbs of monomer per ton of resin or gel coat  
emissions = lbs of monomer

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, fluid impingement technology (FIT), resin impregnators, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ. IDEM, OAQ approval of non-atomized spray application technologies is not required if the Permittee uses one or more of the non-atomized spray technologies identified above.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, or installing a control device. Use of a certified controlled spray program or other emission reduction techniques not yet identified must be approved by IDEM, OAQ prior to use.

- (d) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
  - (1) To the extent possible, a non-VOC, non-HAP material shall be used for cleanup solvent.
  - (2) For VOC- and/or HAP-containing materials:
    - (i) Cleanup solvent containers shall be used to transport solvent from drums to work.
    - (ii) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
    - (iii) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
    - (iv) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
    - (v) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
  - (3) All VOC- and/or HAP-containing material storage containers shall be kept covered when not in use.

#### D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions from the fiberglass spray operations shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

Extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

**D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

**Compliance Determination Requirements**

**D.1.5 Testing Requirements [326 IAC 3-2.1]**

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the volatile organic compound limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**D.1.6 Volatile Organic Compounds (VOC)**

Compliance with the monomer content and usage limitations contained in Condition D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the manufacturer. However, IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

**D.1.7 Particulate Matter (PM)**

The dry filters for particulate matter control shall be in operation at all times when the fiberglass facilities are in operation.

**Compliance Monitoring Requirements**

**D.1.8 Training Requirements**

- (a) The Permittee shall implement an operator-training program.
- (1) All operators that perform fiberglass coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
  - (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
  - (3) All operators shall be given refresher training annually.
- (b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

## **Record Keeping and Reporting Requirements**

### **D.1.9 Record Keeping Requirements**

---

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records that are complete and sufficient to establish compliance with the VOC and volatile organic HAP emission limits established in Conditions D.1.1 and D.1.2. Examples of such records are as follows:
  - (1) Purchase orders.
  - (2) Invoices.
  - (3) Material safety data sheets (MSDS).
  - (4) Manufacturer's certified product data sheets.
  - (5) Calculations.
  - (6) Other records to confirm compliance.
- (b) To document compliance with Condition D.1.7 and D.1.8, the Permittee shall maintain a copy of the operator-training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.10 Reporting Requirements**

---

A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION  
CERTIFICATION**

Source Name: Monaco Coach Corporation  
Source Address: 400 Indiana Avenue, Wakarusa, Indiana 46573  
Mailing Address: P.O. Box 465, Wakarusa, Indiana 46573  
Source Modification No.: 039-12758-00017

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.**

Please check what document is being certified:

- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Source Modification Quarterly Report**

Source Name: Monaco Coach Corporation  
Source Address: 400 Indiana Avenue, Wakarusa, Indiana 46573  
Mailing Address: P.O. Box 465, Wakarusa, Indiana 46573  
Source Modification No.: 039-12758-00017  
Facility: Fiberglass Production Operations  
Parameter: Volatile organic compounds (VOC)  
Limit: Combined input of volatile organic compounds (VOC) to Plants 1, 20, 22, 26, 28, 29, 30, 31, 36, 37, 38, and 45 shall be limited to 249 tons per twelve (12) month consecutive period, rolled on a monthly basis. Solvent waste collected and shipped out can be subtracted from the total solvent usage.

YEAR: \_\_\_\_\_

Month	Input of VOC (tons) This Month	Input of VOC (tons) Last 12 Month Total
Month 1		
Month 2		
Month 3		

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Indiana Department of Environmental Management  
Office of Air Management**

**Technical Support Document (TSD) for a  
Part 70 Significant Source Modification**

**Source Background and Description**

Source Name:	Monaco Coach Corporation
Source Location:	400 Indiana Avenue, Wakarusa, Indiana 46573
County:	Elkhart
SIC Code:	3716, 3083
Operation Permit No.:	039-7559-00017
Operation Permit Issuance Date:	Not yet issued
Significant Source Modification No.:	039-12758-00017
Permit Reviewer:	ERG/MP

The Office of Air Management (OAM) has reviewed a modification application from Monaco Coach Corporation relating to the construction of the following emission units and pollution control devices:

- (a) One (1) barrier coat spray station (BC-1), utilizing non-atomized spray techniques, with a maximum capacity of four (4) units per hour, controlled by dry filters and exhausting to stack SV 36-14.
- (b) One (1) natural gas-fired air make-up unit, rated at two (2) million British thermal units (MMBtu) per hour.

**History**

On September 28, 2000, Monaco Coach Corporation submitted an application to the OAM requesting to add a new fiberglass barrier coat station to their existing plant. Monaco Coach Corporation applied for a Part 70 permit on December 12, 1996.

**Enforcement Issue**

There are no enforcement actions pending.

**Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
SV 36-14	Barrier Coat	16	2.5	10,000	ambient

## Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:  
Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 28, 2000.

## Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 4)

## Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	32.03
PM-10	32.03
SO <sub>2</sub>	0.01
VOC	50.21
CO	0.74
NO <sub>x</sub>	0.88

HAP's	Potential To Emit (tons/year)
styrene	38.46
methyl methacrylate	2.59
toluene	0.16
xylene	0.05
1,2,4-trimethylbenzene	0.0005
Cumene	0.0001
MEK	0.16
TOTAL	41.42

## Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(2) as it is subject to 326 IAC 8-1-6(BACT), pursuant to 326 IAC 2-7-10.5(f)(4) since potential VOC, PM, and PM10 emissions are greater than 25 tons per year (tpy), and pursuant to 326 IAC 2-7-10.5(f)(6) since hazardous air pollutants (HAP) emissions are greater than 10 tpy of a single HAP.

## County Attainment Status

The source is located in Elkhart County.



Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	78.3
PM-10	78.3
SO <sub>2</sub>	0.3
VOC	420
CO	9.7
NO <sub>x</sub>	46.1

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the TSD's for CP 039-8662-00017 and CP 039-7335-00017.

### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Fiberglass barrier coat station	NC*	NC*		39			39
Air make-up unit	0.07	0.07	0.01	0.05	0.74	0.88	<0.1

\*NC = not calculated.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

### State Rule Applicability - Individual Facilities

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

326 IAC 2-2 does not apply because the limited potential to emit from the modification is 39 tons per year, which does not exceed the 40 tons per year significant net emissions increase level under 326 IAC 2-2. This is the first modification the source has performed subsequent to becoming a major PSD source.

#### 326 IAC 8-1-6 (Best Available Control Technology)

The new barrier coat spray station is subject to the requirements of 326 IAC 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions, because the potential emissions are greater than 25 tons per year and there are no other applicable Article 8 rules that apply. It is determined that the BACT for this source shall be satisfied by the meeting the MACT standards of 326 IAC 2-4.1-1 (New Source Toxics Control).

#### 326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to the MACT determination under 326 IAC 2-4.1-1, operating conditions for the new barrier coat spray station shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic HAP from use of such resins and gel coats only shall be less than 39 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
  - (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.

- (2) The emission factors approved for use by IDEM, OAM shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emissions mass basis:

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production <sup>1</sup> Gel Coat	37
Tooling <sup>2</sup> Gel Coat	45
Production Resin, Manual or Mechanical Application, -- Non corrosion Resistant Filled ( $\geq$ 35% by weight)	38
Production Resin	35
Tooling Resin	43

<sup>1</sup> Production refers to the manufacture of parts.

<sup>2</sup> Tooling refers to the manufacture of the molds from which parts are manufactured.

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAM may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from higher than compliant HAP monomer content resin or gel coat) -  
(Emissions from compliant resin or gel coat)  $\div$  (Emissions from compliant resin or gel coat) - (Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) \*  
EF (HAP monomer emission factor for resin or gel coat used, %);

EF, HAP monomer emission factor = emission factor, expressed as pounds (lbs) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAM.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, or installing a control device.

- (d) Optimized spray techniques according to a manner approved by IDEM, OAM shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAM, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:

- (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
- (2) For VOC- and/or HAP-containing materials:
  - (i) Cleanup solvent containers shall be used to transport solvent from drums to work.
  - (ii) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
  - (iii) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
  - (iv) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
  - (v) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (3) All material storage containers shall be kept covered when not in use.

326 IAC 6-3-2 (PM from Process Operations)

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emissions from the barrier coat spray station shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

Extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the barrier coat spray station is in operation.

## Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the particulate emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (d) Weekly visible emission notations of the fiberglass facilities' stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (e) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (f) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (g) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (h) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because the dry filters must be in place to ensure compliance with 326 IAC 6-3-2(c).

### **Conclusion**

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 039-12758-00017.

## **Indiana Department of Environmental Management Office of Air Quality**

### **Addendum to the Technical Support Document for a Part 70 Significant Source Modification**

#### **Source Background and Description**

Source Name:	Monaco Coach Corporation
Source Location:	606 Nelson's Parkway, Wakarusa, Indiana 46573
County:	Elkhart
SIC Code:	2716, 3083
Operation Permit No.:	039-7559-00017
Operation Permit Issuance Date:	Not yet issued
Permit Modification No.:	039-12758-00017
Permit Reviewer:	ERG/MP

On January 16, 2001, the Office of Air Quality (OAQ) had a notice published in the Elkhart Truth in Elkhart, Indiana, stating that the Monaco Coach Corporation had applied for a Part 70 Significant Source Modification relating to the operation of a barrier coat spray station. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On January 24, 2001, Monaco Coach Corporation submitted comments on the proposed Part 70 Significant Source Modification. The summary of the comments is as follows:

#### **Title Page**

##### **Comment 1:**

Title Page. The facility address should be changed from 400 Indiana Avenue to 606 Nelson's Parkway.

Response to Comment 1:

The permit Title Page has been revised accordingly.

#### **Section A**

##### **Comment 2:**

Condition A..1, page 4 of 20. Condition A.1 should be revised to add 606 Nelson's Parkway to the mailing address.

Response to Comment 2:

The permit has been changed as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

---

The Permittee owns and operates a stationary recreational vehicle manufacturing operation.

Responsible Official: Kurt Anderson  
Source Address: **606 Nelson's Parkway** ~~400 Indiana Avenue~~  
Mailing Address: P.O. Box 465, Wakarusa, Indiana 46573  
Phone Number: (219) 862-7347  
SIC Code: 3716, 3083  
County Location: Elkhart  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules;  
Major Source, Section 112 of the Clean Air Act

## Section C

### Comment 3:

Condition C.2(a), page 7 of 20. Condition C.2(a) should be revised to recognize that the information specified in the Condition may have been developed in response to other permit conditions and, if so, the creation of a separate PMP containing the same information is not necessary. Therefore, Condition C.2(a) should be revised to add the following new paragraph after the address for IDEM's Compliance Branch.

If the information specified in Condition C.2(a) has been developed in response to other Conditions of this permit and is contained in other documents, the Permittee is not required to create a separate Preventative Maintenance Plan(s).

Response to Comment 3:

IDEM agrees with the comment, but not the change. Many companies have other documents that can substitute for PMPs, but do not contain the necessary elements of items in 1, 2, & 3. A PMP must contain all 3 items. The company can use another document, it must be recognized and used as a PMP. No change will be made as a result of this comment.

### Comment 4:

Condition C.2(c), page 7 of 20. The second sentence in Condition C.2(c) should be deleted in its entirety. The sentence as proposed by IDEM is beyond the requirements of 326 IAC 1-6-3. Therefore, Condition C.2(c) should be revised as follows:

- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. ~~IDEM, OAM, may require the Permittee to revise its Preventative Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.~~

Response to Comment 4:

The PMP is subject to review and approval by IDEM, OAQ as authorized by 326 IAC 1-6-3. If the PMP proves insufficient as evidenced by a violation of permit conditions, it should be revised to address the problem. There will be no change to the permit as a result of this comment.



### Comment 5:

Condition C.4, page 8 of 20. The introductory sentence in Condition C.4 should be revised to correct the title associated with 326 IAC 5-1-3. Therefore, the introductory sentence in Condition C.4 should be revised as follows:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary ~~Exemptions~~ **Alternate Opacity Limitations**), opacity shall meet the following, unless otherwise stated in this approval:

Response to Comment 5:

The permit has been changed as follows:

#### C.4 Opacity [326 IAC 5-1]

---

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary **Alternate Opacity Limitations** ~~Exemptions~~), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### Comment 6:

Condition C.5, page 8 of 20. Condition C.5 should be revised to further limit the requirement that control equipment be operated to times when the equipment is vented to the atmosphere. In addition, the Condition should be revised to recognize that operation of equipment may also be governed by statutes or rules. Therefore, Condition C.5 should be revised as follows:

#### C.5 Operation of Equipment [326 IAC 2-7-6(6)]

---

Except as otherwise provided **by statute or rule, or** in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation **and are vented to the atmosphere.**

Response to Comment 6:

The permit has been changed as follows:

#### C.5 Operation of Equipment [326 IAC 2-7-6(6)]

---

Except as otherwise provided **by the statute or rule, or** in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

The phrase "and are vented to the atmosphere" has not been added. Venting inside does not exempt the requirement to operate the control equipment as emissions eventually escape to the atmosphere.

#### Comment 7:

Condition C.6(a), page 8 of 20. The last sentence of Condition C.6(a) should be revised to more accurately reflect the underlying regulation - 326 IAC 3-6-2. Therefore, the last sentence of Condition C.6(a) should be revised as follows:

The Permittee shall ~~submit a notice~~ **notify IDEM, OAM** of the actual test date to the above address ~~so that it is received at least two weeks prior to~~ **no less than fourteen (14) days in advance of** the test date.

Response to Comment 7:

IDEM agrees with the comment, but needs actual verification in the form of a written or faxed notice to document the company notified the agency. No change will be made as a result of this comment.

#### Comment 8:

Condition C.8, page 9 of 20. Condition C.8 should be deleted in its entirety because it is not authorized by 326 IAC 2-7-5 or 326 IAC 2-7-6. In addition, the Condition as proposed by IDEM fails to recognize that a compliance monitoring plan does not have to be an entirely new document. To the extent a compliance monitoring plan is necessary, the plan can reference information contained in other documents. Therefore, Condition C.8 should be deleted as follows:

#### G.8 — Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) ~~The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan is comprised of:~~

- (1) ~~This condition;~~
- (2) ~~The Compliance Determination Requirements in Section D of this approval;~~
- (3) ~~The Compliance Monitoring Requirements in Section D of this approval;~~
- (4) ~~The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and~~
- (5) ~~A Compliance Response Plan (GRP) for each compliance monitoring condition of this approval. GRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The GRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of:~~
  - (A) ~~Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and~~

- (B) ~~A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.~~
- (b) ~~(For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.~~
- (c) ~~After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:~~
- ~~(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.~~
  - ~~(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;~~
  - ~~(3) An automatic measurement was taken when the process was not operating; or~~
  - ~~(4) The process has already returned to operating within "normal" parameters and no response steps are required.~~
- (d) ~~Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.~~

Response to Comment 8:

There is sufficient authority for requiring a Compliance Response Plan as a part of a Compliance Monitoring Plan. 326 IAC 2-7-5(1) requires that all Title V permits contain operational requirements and limitations that assure compliance with all applicable requirements. 326 IAC 2-7-5(3) requires that all Title V permits contain monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with applicable requirements. 326 IAC 2-7-5(3)(A)(ii) requires that, at a minimum, the periodic monitoring requirements must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance, even where the applicable requirement does not require periodic testing or instrumental monitoring.

Furthermore, the Compliance Response Plan (CRP) is part of the overall Compliance Monitoring Plan (CMP). The CMP calls for two types of maintenance: preventive maintenance and corrective maintenance. The OAM received many comments from the regulated community regarding the previous version of the CMP, which included preventive and corrective maintenance in the same document, the Preventive Maintenance Plan (PMP). These comments requested that the OAM split the PMP into two plans: one for preventive maintenance and one for corrective maintenance. Therefore, the OAM responded by splitting the preventive maintenance and the corrective maintenance into the PMP and CRP, respectively. The requirement that the permit contain operational requirements and limitations that assure compliance with all applicable requirements, coupled with the rule requirements for compliance monitoring, provides all the necessary authority for this permit requirement.

### Comment 9:

Condition C.9, page 10 of 20. Condition C.9 should be modified to allow for more flexibility. Condition C.9 specifies certain actions that should be taken when noncompliance is demonstrated by a stack test. However, the specific procedures set out in the Condition can interfere with the ability to make determinations on the spot and inhibit flexibility. Additionally, IDEM has no regulatory basis for requiring these actions. Therefore, Condition C.9 should either be deleted, or at a minimum, modified as follows:

- C.9 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
- 
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.
- (c) **The Permittee may agree to follow an alternative set of compliance procedures other than those set out in (a) and (b) above, if it and IDEM, OAM, agree to a different schedule of activities to address any noncompliant situation.**

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Response to Comment 9:

The permit has been changed as follows:

- C.9 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
- 
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.
- (c) **The Permittee may agree to follow an alternative set of compliance procedures other than those set out in (a) and (b) above, if it and IDEM, OAQ, agree to a different schedule of activities to address any noncompliant situation.**

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### Comment 10:

Condition C.10, page 11 of 20. Condition C.10 should be revised by deleting various portions of the Condition because they are vague, redundant with other requirements, and mix requirements for monitoring with other types of information. Regarding Condition C.10(a), at the very least, maintenance will not necessarily be done when the unit is operating at normal representative conditions. Regarding Condition C.10(b), it does not make sense to necessarily record when equipment is down if Monaco performs the specific monitoring and recordkeeping required in other sections of this permit. Regarding Condition C.10(c), no specificity is stated as to what additional observations should be taken or how long they should be taken. In general, these provisions are too vague for comprehension. At a minimum, Condition C.10 should be revised as follows:

#### C.10 ~~Monitoring Data Availability~~ **Failure to Conduct Required Monitoring, Maintenance, and/or Recordkeeping** [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

---

- (a) With the exception of performance tests conducted in accordance with Section C - Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) ~~As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.~~
- (c) ~~If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.~~
- (b)(d) If for reasons beyond its control, the operator fails to **make conduct** required ~~observations, sampling, monitoring, maintenance procedures, or record keeping~~, reasons for this must be recorded.
- (c)(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (d)(f) Temporary, unscheduled unavailability of **qualified** staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform required monitoring, maintenance, and/or recordkeeping the requirements stated in (a) above.

Response to Comment 10:

If Condition C.10(b) were to be removed, the company cannot miss any record keeping requirements even if the unit is shutdown. This condition is provided for the elimination of record keeping when units are shutdown for extended periods of time. Condition C.10(c) is a monitoring requirement when abnormal conditions prevail until such time the company implements corrective measures and must be in the permit. Condition C.10(d) was intended to correct noncompliance or failing to conduct or record monitoring. Condition C.10(f) will remain as stated, the term "qualified" is too vague by itself. The current condition specifies what that person is qualified to perform. No changes will be made to the permit as a result of this comment.

**Comment 11:**

Condition C.11(a), page 11 of 20: Condition C.11(a) should be revised to allow the records to be kept off-site so long as they are readily available. In addition, the Condition should specify the time period in which to provide records after the Commissioner requests them. Therefore, Condition C.11(a) should be revised as follows:

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at ~~the source location~~ a location where they are readily available, for a minimum of three (3) years ~~and available upon the request of an IDEM, OAM, representative~~. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within ~~a reasonable time~~ thirty (30) days after receipt of the request.

Response to Comment 11:

Readily available is too vague and allows for records to be kept virtually anywhere. An inspector may consider records to be readily available if those records are at the site. A company may consider the records readily available 3 days later and 200 miles away. IDEM has the right to request and inspect records under IC 13. Thirty days in many cases is too long to provide information. On the other hand, IDEM could allow more time if volumes or detailed information is needed. No change will be made as a result of this comment.

**Comment 12:**

Condition C.11(c)(4), page 12 of 20. Condition C.11(c)(4) should be modified to remove references to Compliance Response Plans because IDEM does not have authority to require compliance response plans. In addition, IDEM should not impose a separate obligation that the Permittee must maintain records sufficient to demonstrate that improper maintenance does not cause a violation. If the records are not sufficient for such proof, then the Permittee may be exposed to a violation for which it cannot defend itself. The Permittee's defenses, if any are ever needed, are up to the Permittee and should not be mandated by IDEM. Therefore, Condition C.11(c)(4) should be revised as follows:

- (4) Records of preventive maintenance ~~shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records~~ may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. ~~Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported.~~ All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

Response to Comment 12:

See response to Comment 8.

#### Comment 13:

Condition C.12(c), page 13 of 20. Condition C.12(c) should be revised to change the report from a quarterly to a semi-annual report. In addition, the requirement that the report be submitted within 30 days is not based on any regulation and is an insufficient amount of time for Monaco. Thus, the Condition should require reports to be submitted within 60 days of the end of the reporting period. Therefore, Condition C.12(c) should be revised as follows:

- (c) Unless otherwise specified in this approval, any ~~quarterly~~ **semi-annual** report shall be submitted within ~~thirty (30)~~ **sixty (60)** days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Response to Comment 13:

IDEM has authority to require quarterly reports. Reports must be submitted at least every six months under 326 IAC 2-7-5(3)(C)(i). OAM believes that a period of time longer than every quarter will usually not provide sufficient reporting of continuous compliance. There may be fact specific cases that would qualify for semi-annual reporting. No change was made as a result of this comment.

## Section D

#### Comment 14:

Condition D.1.1, page 14 of 20. Condition D.1.1 should be revised to reflect the total amount of VOCs allocated to the source as a whole. In CP 039-7335-00017, IDEM assigned 228.5 tons of VOCs to the source. Those numbers were 11/12ths of the proposed limits, 249 tons, for the total source. As part of a permit appeal, IDEM agreed limiting the source to 11/12ths of the proposed limits was not based on a regulatory requirement. Therefore, the VOC limit for the source should be set at 249 tons. In addition, the Condition should be revised to include Plant 1 in the list of Plants subject to the combined VOC limit. Therefore, Condition D.1.1 should be revised as follows:

##### D.1.1 PSD Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the **combined** input of volatile organic compounds (VOC) to **Plants 1, 20, 22, 26, 28, 29, 30, 31, 36, 37, 38, and 45** ~~the barrier coat spray station (BG-1)~~ shall be limited to ~~249~~ **249.39** tons per twelve (12) consecutive month period.

Response to Comment 14:

The permit has been changed as follows:

D.1.1 PSD Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the **combined** input of volatile organic compounds (VOC) to **Plants 1, 20, 22, 26, 28, 29, 30, 31, 36, 37, 38, and 45** the barrier coat spray station (BC-1) shall be limited to **24939** tons per twelve (12) consecutive month period.

**Comment 15:**

Condition D.1.3, pages 14 of 20. This modification is subject to BACT, but not MACT. Condition D.1.3 should be revised to more closely reflect the language agreed to in another Monaco permit appeal (CP 039-9853-00182) and submitted to IDEM as part of the comments to the draft Title V permit for the Elkhart facility (T-039-7511-00182). In addition, certain other stylistic revisions should be made to this Condition. Therefore, Condition D.1.3 should be revised as follows:

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

~~Pursuant to 326 IAC 8-1-6, t~~The new barrier coat spray station (BC-1) is subject to the requirements of 326 IAC 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions. ~~BACT for this new source shall be satisfied by the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) specified in Condition D.1.3.~~

~~D.1.3 New Source Toxics Control [326 IAC 2-4.1-1]~~

~~Pursuant to the MACT determination under 326 IAC 2-4.1-1, Pursuant to 326 IAC 8-1-6,~~ operating conditions for the ~~new barrier coat spray station (BC-1)~~ **fiberglass production operations** shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic HAP from use of such resins and gel coats only shall be less than ~~39.2~~ **249** tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
  - (1) Monthly usage by weight, **weight percent** content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. ~~Emission factors shall be obtained from the reference approved by IDEM, OAM~~ **The emission factors used shall be approved by IDEM, OAM.**
  - (2) The emission factors approved for use by IDEM, OAM ~~shall be~~ **are** taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emissions mass basis:



Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production <sup>1</sup> Gel Coat	37
Tooling <sup>2</sup> Gel Coat	45
Production Resin, Manual or Mechanical Application, -- Non corrosion Resistant Filled ( $\geq 35\%$ by weight)	38
Production Resin	35
Tooling Resin	43

<sup>1</sup> Production refers to the manufacture of parts.

<sup>2</sup> Tooling refers to the manufacture of the molds from which parts are manufactured. HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in ~~the table in~~ this subsection or additional emission reduction techniques approved by IDEM, OAM may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in ~~the table in~~ this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat)  $\leq$  (Emissions from compliant resin or gel coat) - (Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) \* EF (HAP monomer emission factor for resin or gel coat used, % lb/ton);

EF, HAP monomer emission factor = emission factor, expressed as pounds (lbs) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, **fluid impingement technology (FIT), resin impregnators**, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAM. **IDEM, OAM approval of non-atomized spray application technologies is not required if the Permittee uses one or more of the non-atomized spray technologies identified above.**

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, or installing a control device. **Use of a certified controlled spray program or other emission reduction techniques not yet identified must be approved by IDEM, OAM prior to use.**

- (d) Optimized spray techniques according to a manner approved by IDEM, OAM shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAM, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
- (1) To the extent possible, a non-VOC, non-HAP ~~solvent~~ **material** shall be used for cleanup **solvent**.
  - (2) For VOC- and/or HAP-containing materials:
    - (i) Cleanup solvent containers shall be used to transport solvent from drums to work.
    - (ii) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
    - (iii) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
    - (iv) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
    - (v) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
  - (3) All **VOC- and/or HAP-containing** material storage containers shall be kept covered when not in use.

Response to Comment 15:

This source modification is not subject to MACT, so the permit has been revised accordingly (including re-numbering all conditions after D.1.2). In addition, the BACT conditions have been revised to more closely match the conditions in the Title V permit for the Elkhart facility and the new styrene rule. The permit has been changed as follows:

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

~~Pursuant to 326 IAC 8-1-6, the new barrier coat spray station (BC-1) is subject to the requirements of 326 IAC 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions. BACT for this new source shall be satisfied by the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) specified in Condition D.1.3.~~

~~D.1.3 New Source Toxics Control [326 IAC 2-4.1-1]~~

~~Pursuant to the MACT determination under 326 IAC 2-4.1-1, Pursuant to 326 IAC 8-1-6,~~  
operating conditions for the new barrier coat spray station (BC-1) fiberglass production  
operations shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic HAP from use of such resins and gel coats only shall be less than ~~39.2~~ **249** tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
- (1) Monthly usage by weight, **weight percent** content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. ~~Emission factors shall be obtained from the reference approved by IDEM, OAQ~~ **The emission factors used shall be approved by IDEM, OAQ.**
- (2) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emissions mass basis:

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production <sup>1</sup> Gel Coat	37
Tooling <sup>2</sup> Gel Coat	45
Production Resin, Manual or Mechanical Application, -- Non corrosion Resistant Filled (> 35% by weight)	38
Production Resin	35
Tooling Resin	43

<sup>1</sup> Production refers to the manufacture of parts.

<sup>2</sup> Tooling refers to the manufacture of the molds from which parts are manufactured. HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAM may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

~~(Emissions from higher than compliant HAP monomer content resin or gel coat) -  
(Emissions from compliant resin or gel coat) < (Emissions from compliant resin or gel coat) - (Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques):~~

~~Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) \* EF  
(HAP monomer emission factor for resin or gel coat used, % lb/ton);~~

~~EF, HAP monomer emission factor = emission factor, expressed as pounds (lbs) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.~~

$$Em_A \leq (M_R * E_{Ra}) + (M_G * E_{Ga})$$

Where:

**M<sub>R</sub>** = Total monthly mass of resins within each resin category

**M<sub>G</sub>** = Total monthly mass of gel coats within each gel coats category

**E<sub>Ra</sub>** = Emission factor for each resin based on allowable monomer content and allowable application method for each resin category.

**E<sub>Ga</sub>** = Emission factor for each gel coat based on allowable monomer content for each gel coat category

**Em<sub>A</sub>** = Actual monthly emissions from all resins and gelcoats based on material specific emission factors, emission reduction techniques and emission controls

*Units: mass = tons*

*emission factor = lbs of monomer per ton of resin or gel coat*

*emissions = lbs of monomer*

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, **fluid impingement technology (FIT), resin impregnators**, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ. **IDEM, OAQ approval of non-atomized spray application technologies is not required if the Permittee uses one or more of the non-atomized spray technologies identified above.**

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, or installing a control device. **Use of a certified controlled spray program or other emission reduction techniques not yet identified must be approved by IDEM, OAQ prior to use.**

- (d) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
- (1) To the extent possible, a non-VOC, non-HAP ~~solvent~~ **material** shall be used for cleanup **solvent**.
  - (2) For VOC- and/or HAP-containing materials:
    - (i) Cleanup solvent containers shall be used to transport solvent from drums to work.
    - (ii) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
    - (iii) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
    - (iv) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
    - (v) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
  - (3) All **VOC- and/or HAP-containing** material storage containers shall be kept covered when not in use.

#### Comment 16:

Condition D.1.4, page 17 of 20. The first paragraph of Condition D.14 should be revised to correct the applicability of the particulate matter emission rate. Currently, the paragraph states that the particulate matter emission rate applies to the barrier coat spray station alone. This should be revised to apply the emission rate to the fiberglass spray operations. Therefore, the first paragraph in Condition D.1.4 should be revised as follows:

#### D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions from the ~~barrier coat spray station~~ **fiberglass spray** operations shall not exceed the pound per hour emission rate established as E in the following formula:

Response to Comment 16:

The permit has been changed as follows:

**D.1.43 Particulate Matter (PM) [326 IAC 6-3-2(c)]**

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions from the **fiberglass spraybarrier coat-spray station** operations shall not exceed the pound per hour emission rate established as E in the following formula:

**Comment 17:**

Condition D.1.5, page 17 of 20. Condition D.1.5 should be revised to clarify that control devices are not required for this facility. Therefore, Condition D.1.5 should be revised as follows:

**D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is **not** required for this facility ~~and its control device~~.

Response to Comment 17:

The Preventive Maintenance Plan is still required, but existing plans may be used. There has been no change to the permit as a result of this comment.

**Comment 18:**

Condition D.1.6, page 17 of 20. Condition D.1.6 should be revised to include a statement that the permittee retains its rights to review if the Commissioner should require compliance testing. Therefore, Condition D.1.6 should be revised as follows:

**D.1.65 Testing Requirements [326 IAC 3-2.1]**

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. **The Permittee retains all of its rights to review should the Commissioner require compliance testing.** If testing is required by IDEM, compliance with the volatile organic compound limit specified in Condition D.1.32 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Response to Comment 18:

IC 4-21.5 already allows for appeal of decisions. No change will be made as a result of this comment.

**Comment 19:**

Condition D.1.8, page 17 of 20. Condition D.1.8 should be revised to further limit the requirement addressing the operation of control equipment to times when the equipment is used to comply with an applicable requirement and is vented to the atmosphere. Therefore, Condition D.1.8 should be revised as follows:

**D.1.8 Particulate Matter (PM)**

The dry filters for particulate matter control shall be in operation at all times when the fiberglass facilities are in operation, **and the facilities are vented to the atmosphere.**

Response to Comment 19:

Venting inside does not exempt the requirement to operate the control equipment as emissions eventually escape to the atmosphere. There has been no change to the permit as a result of this comment.

**Comment 20:**

Condition D.1.10(a)(1), page 18 of 20. Condition D.1.10(a)(1) should be revised to remove the requirement that the permittee retain certain records. It is up to the permittee to determine what records are necessary to demonstrate compliance. For this reason, the Condition should identify records that may be used to verify the type and amount of material used. Therefore, Condition D.1.10(a)(1) should be revised as follows:

- (1) The usage by weight and monomer content of each resin and gel coat. Records ~~shall~~ **may** include purchase orders, invoices, and material safety data sheets (MSDS) **as is** necessary to verify the type and amount used;

Response to Comment 20:

IDEM agrees that it is up to the permittee to determine what records are necessary to determine compliance. However, "May" is an unenforceable word/condition and can imply that the company doesn't need to keep those specific records. The permit condition will be rewritten as follows to incorporate the language in 326 IAC 20-25-6, which provides only "examples" of the types of data that may be needed:

**D.1.109 Record Keeping Requirements**

- 
- (a) To document compliance with Conditions D.1.1 and D.1.32, the Permittee shall maintain records ~~in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be~~ **that are** complete and sufficient to establish compliance with the VOC and volatile organic HAP emission limits established in Conditions D.1.1 and D.1.32. **Examples of such records are as follows:**
    - (1) **Purchase orders.**
    - (2) **Invoices.**
    - (3) **Material safety data sheets (MSDS).**
    - (4) **Manufacturer's certified product data sheets.**
    - (5) **Calculations.**
    - (6) **Other records to confirm compliance.**

- 
- ~~(1) The usage by weight and monomer content of each resin and gel coat. Records **may** include purchase orders, invoices, and material safety data sheets (MSDS) as in necessary to verify the type and amount used;~~

**Comment 21:**

Condition D.1.10(a)(2), page 18 of 20. Condition D.1.10(a)(2) should be deleted in its entirety because maintaining a log of the dates of use serves no purpose and, as such, is unnecessarily burdensome. Therefore, Condition D.1.10(a)(2) should be deleted as follows:

- ~~(2) A log of the dates of use;~~

Response to Comment 21:

The permit has been changed as follows:

**D.1.109 Record Keeping Requirements**

- 
- (a) To document compliance with Conditions D.1.1 and D.1.32, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and volatile organic HAP emission limits established in Conditions D.1.1 and D.1.32.
- (1) The usage by weight and monomer content of each resin and gel coat. Records ~~may~~ **shall** include purchase orders, invoices, and material safety data sheets (MSDS) **as is** necessary to verify the type and amount used;
- (2) ~~A log of the dates of use;~~

**Comment 22:**

Condition D.1.10(b), page \_\_ of \_\_. Condition D.1.10(b) should be revised to be consistent with the previously discussed revision to Condition D.1.5. Therefore, Condition D.1.10(b) should be revised as follows:

- (b) To document compliance with Condition D.1.0, the Permittee shall maintain a copy of the operator-training program and training records. ~~and those additional inspections prescribed by the Preventative Maintenance Plan~~

Response to Comment 22:

The Preventive Maintenance Plan is still required, but existing plans may be used. There has been no change to the permit as a result of this comment.

**Comment 23:**

Condition D.1.12, page 18 of 20. As previously stated, quarterly reports are unnecessary. Therefore, Condition D.1.12 should be revised to refer to a semi-annual report. In addition, requiring reports to be submitted within 30 days of the end of the period is not based on any requirement and is an insufficient amount of time for Monaco. As such, the reports should be submitted within 60 days of the end of the period. Therefore, Condition D.1.12 should be revised as follows:

**D.1.1210 Reporting Requirements**

---

A ~~quarterly~~ **semi-annual** summary of the information to document compliance with Condition D.1.1 and D.1.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within ~~thirty (30)~~ **sixty (60)** days after the end of the ~~quarter~~ **semi-annual period** being reported.

Response to Comment 23:

IDEM has authority to require quarterly reports. Reports must be submitted at least every six months under 326 IAC 2-7-5(3)(C)(i). OAM believes that a period of time longer than every quarter will usually not provide sufficient reporting of continuous compliance. These may be fact specific cases that would qualify for semi-annual reporting. No change was made as a result of this comment.



**Comment 24:**

Part 70 Source Modification Quarterly Reports, pages 20 of 20. The reports should be renamed as Semi-Annual reports and the references to “quarter” in the reports should be replaced with references to “semi-annual.” In addition, the Part 70 Source Modification report should apply to all Plants, not just the barrier coat station in Plant 36. Emission limits for the combined Plants should be limited to 249 tons.  
Response to Comment 24:

The reports have been changed to reflect the 249 ton limit for all plants. However, they still need to be submitted on a quarterly basis.

Appendix A: Emissions Calculations

Page 1 of 4 TSD App A

Fiberglass Barrier Coat Spray Station

VOC and PM

Company Name: Monaco Coach Corporation

Address City IN Zip: 16710 Maple Drive, Goshen, IN 46526

CP: 039-12758

Pit ID: 039-00017

Reviewer: MOP

Date: 12/25/00

		USAGE	INCREASED				UEF Styrene	Styrene	VOC	PM						UEF MMA	
MATERIAL NAME	MATERIAL	PER UNIT	USAGE	LBS	%VOC	%solids	Emission	Emissions	Emissions	Emissions	BOOTH	APPLICATION	Transfer	%Styrene	MMA	Emission	MMA
	I.D. NO.	lbs.	lbs.	/GAL	/WT	/WT	Factor*		TONS**	TONS	SV/ID#	METHOD	Efficiency (%)	% weight	% weight	Factor*	Emissions
<b>SOLVENT/CLEANERS:</b>																	
CLEANER S-280 SUPER FLUSH	S-280	4.000	9,600.0	8.88	1.00	0.00			4.800		GV36-1TO6	WIPE	100				
CLEANER SUPER BLUE RESIN	SUPER BLUE	0.750	1,800.0	8.76	0.08	0.93			0.068		GV36-1TO6	WIPE	100				
CONDITIONER ACROLAC 5 GAL PAI	780	0.300	720.0	11.00	0.35	0.65			0.126		GV36-1TO6	WIPE	100				
THINNER	DTL151	0.500	1,200.0	6.64	0.35	0.65			0.210		GV36-1TO6	WIPE	100				
THINNER ALL PURPOSE	DTL16	0.100	240.0	6.66	0.70	0.30			0.084		GV36-1TO6	WIPE	100				
<b>RESIN/GEL:</b>																	
MARKING FLUID DYKEM BLUE	DX-100	0.005	12.0	6.27	1.00	0.00			0.006	0.00	SV36-1 TO 14	Air Assisted Airless	75				
CATALYST 30 CLEAR	DDM-9	6.000	14,400.0	9.04	0.44	0.56			3.168	1.01	SV36-1 TO 14	Air Assisted Airless	75				
CATALYST LUPERSOL DDM-9 RED	DDM-9 RED	0.500	1,200.0	9.04	0.44	0.56			0.264	0.08	SV36-1 TO 14	Air Assisted Airless	75				
GELCOAT COLONIAL WHITE NEO	GG1-5054	90.000	216,000.0	8.59	0.36	0.64	294	15.876	18.306	17.28	SV36-1 TO 14	Air Assisted Airless	75	33.10	3.30	45.00	2.430
GELCOAT DYNASTY WHITE	GM1-5120	0.100	240.0	11.43	0.32	0.68	280	0.017	0.017	0.02	SV36-1 TO 14	Air Assisted Airless	75	31.50			
PRIMER IMPACT GREY Gelcoat	5788E90009	4.500	10,800.0	10.64	0.33	0.67	261	0.705	0.867	0.90	SV36-14	Air Assisted Airless	75	29.30	4.00	60.00	0.162
GELCOAT LUND FLEX WHITE PRIME	5784W90002	0.100	240.0	11.81	0.32	0.68	280	0.017	0.017	0.02	SV36-1 TO 14	Air Assisted Airless	75	31.30			
RESIN COOK FILLED	40-4457	2.000	4,800.0	9.00	0.40	0.60	183	0.220	0.220	0.36	SV36-1 TO 14	Air Assisted Airless	75	38.00			
RESIN HAF filled	COR54-183-674	65.000	156,000.0	9.63	0.37	0.63	176	6.864	6.864	12.29	SV36-1 TO 14	Air Assisted Airless	75	37.50			
RESIN, LOW STYRENE, STYPOL	40-4361	4.500	10,800.0	9.22	0.35	0.65	140	0.378	0.378		SV36-1 TO 14	flowcoater	100	35.30			
RESIN UNSAT POLY 22241	COR61-AC-572	200.000	480,000.0	9.63	0.35	0.65	119	14.280	14.280		SV36-1 TO 14	flowcoater	100	33.50			
STYRENE RESIN	233002	0.500	1,200.0	7.57	1.00	0.00	338	0.101	0.101		SV36-1 TO 14	flowcoater	100	100.00			
<b>WAX/RELEASE:</b>																	
CLEANER MOLD PREP	TR-905	0.100	240.0	7.05	1.00	0.00			0.120		GV36-1TO6	SPRAY	100				
RELEASE	TR-900	0.010	24.0	7.30	0.98	0.02			0.012		GV36-1TO6	SPRAY	100				
TR 112 GREEN EDGE WAX	TR112	0.250	600.0	6.40	0.85	0.15			0.255		GV36-1TO6	SPRAY	100				
<b>TOTAL:</b>								<b>38.457</b>	<b>50.162</b>	<b>31.96</b>							
																	<b>2.59</b>

\* UEF emission Factors in terms of pounds emitted per tons used

\*\* VOC emissions for resins and gelcoats are the sum of styrene and MMA emissions.

Appendix A: Emissions Calculations  
 Fiberglass Barrier Coat Spray Station  
 HAPs  
 Company Name: Monaco Coach Corporation  
 Address City IN Zip: 16710 Maple Drive, Goshen, IN 46526  
 CP: 039-12758  
 PIT ID: 039-00017  
 Reviewer: MOP  
 Date: 11/25/00

		USAGE	INCREASED		UEF Styrene	Styrene			UEF MMA						1,2,4-	1,2,4-				
MATERIAL NAME	MATERIAL I.D. NO.	PER UNIT lbs.	USAGE lbs.	LBS /GAL	Emission Factor*	Emissions	Styrene % weight	MMA % weight	Emission Factor*	MMA Emissions	Toluene % weight	Toluene Emissions	Xylene % weight	Xylene Emissions	-trimethylbenzene % weight	-trimethylbenzene Emissions	Cumene % weight	Cumene Emissions	MEK % weight	MEK Emissions
<b>SOLVENT/CLEANERS:</b>																				
CLEANER S-280 SUPER FLUSH	S-280	4.000	9,600.0	8.88																
CLEANER SUPER BLUE RESIN	SUPER BLUE	0.750	1,800.0	8.76																
CONDITIONER ACROLAC 5 GAL PAI	780	0.300	720.0	11.00																
THINNER	DTL151	0.500	1,200.0	6.64							10	0.06								
THINNER ALL PURPOSE	DTL16	0.100	240.0	6.66							20	0.02	1	0.00						
<b>RESIN/GEL:</b>																				
MARKING FLUID DYKEM BLUE	DX-100	0.005	12.0	6.27																
CATALYST 30 CLEAR	DDM-9	6.000	14,400.0	9.04															2	0.14
CATALYST LUPERSOL DDM-9 RED	DDM-9 RED	0.500	1,200.0	9.04															2	0.01
GELCOAT COLONIAL WHITE NEO	GG1-5054	90.000	216,000.0	8.59	294	15.876	33.10	3.30	45.00	2.430										
GELCOAT DYNASTY WHITE	GM1-5120	0.100	240.0	11.43	280	0.017	31.50													
PRIMER IMPACT GREY Gelcoat	5788E90009	4.500	10,800.0	10.64	261	0.705	29.30	4.00	60.00	0.162										
GELCOAT LUND FLEX WHITE PRIME	5784W90002	0.100	240.0	11.81	280	0.017	31.30													
RESIN COOK FILLED	40-4457	2.000	4,800.0	9.00	183	0.220	38.00													
RESIN HAF filled	COR54-183-674	65.000	156,000.0	9.63	176	6.864	37.50													
RESIN, LOW STYRENE, STYPOL	40-4361	4.500	10,800.0	9.22	140	0.378	35.30													
RESIN UNSAT POLY 22241	COR61-AC-572	200.000	480,000.0	9.63	119	14.280	33.50													
STYRENE RESIN	233002	0.500	1,200.0	7.57	338	0.101	100.00													
<b>WAX/RELEASE:</b>																				
CLEANER MOLD PREP	TR-905	0.100	240.0	7.05							60	0.07	40	0.05						
RELEASE	TR-900	0.010	24.0	7.30									1	0.00	4	0.00	1	0.00		
TR 112 GREEN EDGE WAX	TR112	0.250	600.0	6.40																
					TOTAL:	38.457				2.59		0.16		0.05		0.0005		0.0001		0.16

\* UEF emission Factors in terms of pounds emitted per tons used

**Appendix A: Emissions Calculations****Natural Gas Combustion Only****MM BTU/HR <100****Small Boilers****Air Make Up (AMU 36(g))****Company Name: Monaco Coach Corporation****Address City IN Zip: 16710 Maple Drive, Goshen, IN 46526****CP: 039-12758****Plt ID: 039-00017****Reviewer: MOP****Date: 11/25/00**

Heat Input Capacity

MMBtu/hr

2.00

Potential Throughput

MMCF/yr

17.52

Pollutant

	PM*	PM10*	SO2	NOx**	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.07	0.07	0.01	0.88	0.05	0.74

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

(SUPPLEMENT D 7/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

gasc99.wk4 9/95

updated 4/99

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only**

Page 4 of 4 TSD App A

**MM BTU/HR <100**

**Small Boilers**

**Air Make Up (AMU 36(g))**

**Company Name: Monaco Coach Corporation**

**Address City IN Zip: 16710 Maple Drive, Goshen, IN 46526**

**CP: 039-12758**

**Plt ID: 039-00017**

**Reviewer: MOP**

**Date: 11/25/00**

**HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.840E-05	1.051E-05	6.570E-04	1.577E-02	2.978E-05

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.380E-06	9.636E-06	1.226E-05	3.329E-06	1.840E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4, Table 1.4-4.

gasc99.wk4 9/95

updated 4/99